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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,152	04/02/2004	Otfried Schwarzkopf	825-00179	1195

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EXAMINER

LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
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3745

MAIL DATE	DELIVERY MODE
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08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/817,152

Applicant(s)

SCHWARZKOPF, OTFRIED

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/30/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Drawings

Figured 10 and 11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: figures 10 and 11 are not discussed in the brief description of the drawings. Appropriate correction is required.

Claim Objections

Claims 5-7 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-7 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 1-4 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 1 and 3, and claim 2 line 4-5 "in particular..." is confusing, since it is unclear whether or not the elements following in particular are part of the claim limitations. In claim 1 line 7 "can be" is not a positive limitation, suggest replacing it with --is selectively--. In claim 1 line 13 "the articulated connection" is confusing, since it is "the sliding sleeve" of line 6.

Claim 3 line 2 "the force transmission element" has no antecedent basis if dependent from claim 1. In claim 3 line 3 "an annular swivel disk" should be --the swivel disc--, to agree with claim 1 line 3.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being anticipated by Loomis. Loomis discloses a reciprocating compressor comprising a sliding sleeve (14) axially movable along a drive shaft (12) and connected to a disk (25) in an articulated manner (via 27), to transmit substantially only torque (column 3 line 7-8, 26-28); wherein the disk is provided substantially only axial support by a cylindrical supporting element (30), which rotates with and is spaced apart from the drive shaft by a force transmission element (31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claim is and are rejected under 35 U.S.C. § 103 as being unpatentable over Kuhn et al in view of Loomis. Kuhn et al discloses a reciprocating compressor comprising a sliding sleeve (21) axially movable along a drive shaft (5) and connected to a disk (6) in an articulated manner (via 22, 23); wherein the disk is provided axial and torque support by a spherical supporting element (15), which rotates with and is spaced apart from the drive shaft by a force transmission pin (13), projecting away from the drive shaft at an angle, such that when the swivel disk is tilted, the pin axis is oriented radially with respect to the swivel disk; but does not disclose that the sleeve transmits substantially only torque and the supporting element provides substantially only axial support.

Loomis teaches, for a reciprocating compressor comprising a sliding sleeve (14) axially movable along a drive shaft (12) and connected to a disk (25) in an articulated manner (via 27); wherein the disk is provided support by a supporting element (30), which rotates with and is spaced apart from the drive shaft by a force transmission element (31); that the sleeve transmits substantially only torque, via splines (column 3 line 7-8, 26-28) and the supporting element provides substantially only axial support, by allowing the disk to move circumferentially relative to the force transmitting element.

Since the supports for the disk of Kuhn et al and Loomis are equivalent in the swash plate machine art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to substitute a splined sleeve for the sleeve of Kuhn et al, to transmit substantially only torque; and by substituting a supporting element, which provides substantially only axial support, by allowing the disk to move circumferentially relative to the force transmitting element, for the supporting element of Kuhn et al provide substantially only axial support, as taught by Loomis; since one having ordinary skill in the art would understand how to make the substitution and the results are reasonably predictable.

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Conclusion

Claim 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:00 AM -4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

/F. Daniel Lopez/

F. Daniel Lopez
Primary Examiner
Art Unit 3745
August 16, 2007